

[800]

with regard to numbers, and, if I have committed any mistake, I hope your usual goodness will excuse,

Dear Sir,

Sion-College,
Novem. 20,
1754.

Your most obedient servant,

W^m. Brakenridge.

XCVI. *A Letter from Mr. William Watson, F. R. S. to Charles Gray, of Colchester, Esq; F. R. S. in relation to a large Calculus found in a Mare.*

Dear Sir,

London, July 26, 1754.

Read Nov. 21,
1754.

I Take this opportunity, by your means, of sending back to its owner, who is so unwilling to part with it, the stone taken out of the belly of the mare, which you were so obliging as to send me. I should have been glad indeed to have been informed precisely, from what part of the abdomen of the mare it was taken; but this you was prevented from transmitting to me, on account of the ignorance of the person, who opened the mare, and who said, that the stone was found in or near her kidneys; though I am of opinion it was formed in the intestinal tube. As there are at present no ordinary meetings of the Royal Society, I was prevented from laying this stone before that learned body: I shewed it, however to several of the gentlemen, who, with myself, agree, that a stone, large
as

as this, is a very great curiosity. It is composed of different laminæ, and its figure is that of an oblate spheroid, whose greatest diameter is eight inches and an half; its lesser eight inches. Its surface is extremely regular, but appears in several of its parts, as though it had been corroded by some acrid menstruum; and in a place or two, where the external lamina is quite worn away, and the lamina immediately underneath it polished during its continuance in the mare, the calculus has great resemblance in colour to occidental bezoar.

This stone weighed in air fifteen pounds twelve ounces avoirdupois; in water six pounds: so that its specific gravity to that of water is nearly as eight to five. And you may observe, that it is not only considerably lighter than any fossil petrification, but much more so than many animal; some human calculi, when fresh extracted, being to water as two to one.

With regard to its bulk, it is the largest I remember to have been observed, except one presented to the Royal Society in the year 1737, which was taken out of the stomach of a dray-horse, belonging to Sir Henry Hicks, Knt. at Deptford, and which weighed nineteen pounds avoirdupois, exclusive of the outward shell or crust, which was broken off in several pieces. Both these stones were in appearance like a pebble, and formed of different laminæ. The greatest circumference of that you sent me was somewhat more than twenty-six inches; that of Sir Henry Hickes's twenty-eight.

Sir Henry Hickes's horse was twenty-two years old; and, for eleven or twelve years before he died, frequently was observed to be in violent pain: but

the mare, the subject of the present letter, though sixteen years old, gave no signs of being in pain till about three months before her death, when she would frequently lie down, and roll about. And it is the more extraordinary, that, large as the stone was (and it must have been very large for a long time) it did not disable the mare from doing her usual work for a more considerable time before her death; which did not seem to be occasioned by the stone, she dying near her foaling-time; nor so far disturb her oeconomy, as to prevent her propagating her species.

The Earl of Macclesfield, our most worthy President, Dr. Birch, and several of our friends, who have seen this stone, join with me in thanks to you for this communication.

In the year 1746, his Grace the Duke of Richmond presented to the Society a stone found in the colon of a horse, the circumference of which was sixteen inches. His Grace at the same time presented some other stones, found in the intestines of a mare, which were polished like bezoar. It was very remarkable, that two of these stones, when sawed asunder, were found to have been formed each upon an iron nail, as a nucleus.

I shall embrace every opportunity of shewing you, that I am, with the greatest respect,

Dear Sir,

Your most obliged and obedient servant,

W. Watson.